REMARKS

With this amendment, claims 1-3, 5-13, 15-18 and 26 are pending in the application. Claims 1, 11, 18 and 26 are the only claims in independent form. These independent claims are currently amended to exclude the presence of 4-chlorophyenyl-5-fluoro-2-hydroxyphenylmethanone, and thereby, excludes the metabolite byproducts of progabide that are known to be responsible for bulk of side effects associated with this class of medicaments. Support for the claim amendments is found throughout the application as filed and specifically including page 11, lines 11-19. As such, Applicant submits that no new matter has been added by way of this amendment. Claims 1-3, 5-13, 15-18 and 26 currently stand rejected under 35 U.S.C. §103(a) over Aebischer et al. in view Bergmann (both references of record).

Remarks Directed to Rejection of Claims 1-3, 5-13, 15-18, and 26 under 35 U.S.C. §103(a) over Aebischer et al. in View of Bergmann

Currently, claims 1-3, 5-13, 15-18, and 26 stand rejected under 35 U.S.C. §103(a) over Aebischer et al. (U.S. Patent 5,474,547) in view of Bergmann (*Clinical Neuropharmacology*, 1985). Aebischer et al. is cited for teaching the alleviation of movement disorders associated with Parkinson's and Huntington's diseases through the administration of GABA, GABA agonists and GABA potentiators by implantation of devices. (Paper No. 03282007, page 2, fourth paragraph).

Aebischer et al. is noted in the outstanding Office Action as not specifically teaching the claimed compound of gamma aminobutyramide. (Paper No. 03282007, page 3, second paragraph). Bergmann is cited to bolster this deficiency of Aebischer et al. through its teaching of progabide. As conceded in the specification, and in the present office action, progabide is metabolized through an intermediate (α-chloro-4'phenyl fluoro-5 hydroxy-2-benzylidene amino 4 butanoate sodium) to gamma aminobutyramide. (Paper No. 03282007, page 3, third paragraph).

Independent claims 1, 11, 18, and 26 are currently amended to exclude the presence of the compound 4-chlorophyenyl-5-fluoro-2-hydroxyphenylmethanone. These amendments are fully supported in the instant specification as filed. (page 11, lines 11-19.) These amendments clarify that methods are provided according to the present invention which preclude the inclusion of progabide administration and the insoluble ketone byproduct associated with teaching of Bergmann.

Applicant hereby incorporates by reference the remarks made of record in the amendment of November 23, 2005 with regard to the limitations of Bergmann detailed on pages 8-11 of that amendment, as well as the remark made of record in the amendment of February 22, 2006, pages 2-5.

In addition, administration of progabide results in metabolism to α-chloro-4' fluoro-5 hydroxy-2-benzylidene amino 4 butanoate sodium and then to gamma aminobutyramide. However, this metabolic pathway also produces 4-chlorophyenyl-5-fluoro-2-hydroxyphenylmethanone. (Bergmann, 2004, p. 11, lines 13-14.) Thus, 4-chlorophyenyl-5-fluoro-2-hydroxyphenylmethanone is necessarily inherent with the administration of progabide.

In *Schering Corp. v. Geneva Pharmaceuticals, Inc.*, 339 F.3d 1373, 67 USPQ2d 1664 (Fed. Cir. 2003), the claims at issue covered a metabolite of the drug loratadine, i.e., "the compound formed in the patient's body upon ingestion of [that] pharmaceutical." *Id.* at 1375. The board held that these claims were anticipated by an earlier patent for the drug itself. *Id.* at 1382. This conclusion was based in part on the assumption that ingesting the earlier claimed pharmaceutical would create the metabolite, and thus, infringe the metabolite patent. *Id.* at 1380. Similarly, administration of progabide would necessarily and inherently create the metabolite 4-chlorophyenyl-5-fluoro-2-hydroxyphenylmethanone, and claims incorporating 4-chlorophyenyl-

5-fluoro-2-hydroxyphenylmethanone would be anticipated by the administration of progabide. In contrast, the instant claims are exclusive of 4-chlorophyenyl-5-fluoro-2-hydroxyphenylmethanone, and thus, are neither anticipated by nor obvious over Bergmann.

To establish *prima facie* obviousness of a claimed invention, all the claim limitations must be taught or suggested by the prior art. *In re Royka*, 490 F.2d 981, 180 USPQ 580 (CCPA 1974). There is no teaching or suggestion of administration of gamma aminobutyramide exclusive of 4-chlorophyenyl-5-fluoro-2-hydroxyphenylmethanone in the teaching of Aebischer et al. or Bergmann. To the contrary, teaching of the presence of 4-chlorophyenyl-5-fluoro-2-hydroxyphenylmethanone is necessarily present in Bergmann because of the administration of progabide for the treatment of seizure disorders, and the inevitable metabolism of progabide to 4-chlorophyenyl-5-fluoro-2-hydroxyphenylmethanone. Thus, claims 1, 11, 18, and 26 specifically exclude the administration of progabide, which subsequently metabolizes to 4-chlorophyenyl-5-fluoro-2-hydroxyphenylmethanone. In at least this way, claims 1, 11, 18, and 26 are nonobvious over Aebischer et al. in view of Bergmann.

As such, it is respectfully submitted that neither prior art reference of Aebischer et al. or Bergmann teach or suggest the administration **of only** gamma-aminobutyramide exclusive of 4-chlorophyenyl-5-fluoro-2-hydroxyphenylmethanone in a method to treat the cited disorders including spastic disorders, convulsions, epilepsy, idiopathic dystonia and torsional dystonia. As the prior art reference combination fails to provide all the claimed elements, as well as a compound with the pharmacological advantages of gamma aminobutyramide in avoiding side effects associated with 4-chlorophenyl-5-fluoro-2-hydroxyphenylmethanone, it is respectfully submitted that the pending claims are nonobvious over the prior art reference combination.

If an independent claim is nonobvious under 35 U.S.C. §103, then any claim depending therefrom is nonobvious. *In re Fine*, 837 F.2d 1071, 5 USPQ2d 1596 (Fed. Cir. 1988). Therefore, claims 2-3, 5-10, 12-13, and 15-17 are also nonobvious.

Regarding claims 2, 3, 5, 6, 13, 15, 16, and 17 drawn to intrathecal or intraventricular administration, Aebischer et al. teaches away from administration via these routes. Aebischer et al. teaches that:

> the systemic or intraventricular application of GABA in human patients would likely lead to undesirable side effects because the inhibitory neurotransmitter would also affect GABA receptor in brain areas unrelated to the pathological condition. Localized infusion through cannulae of GABA-mimetic drugs would be inconvenient and would likely be associated with problems such as infection and mechanical failure of pumping devices. (col. 2, lines 9-16.)

Thus, Aebischer teaches that intraventricular administration such as in claims 3, 13, and 18 is "undesirable," *Id.*, specifically teaching away from intraventricular administration. Further, the use of an implantable pump or administration through a catheter such as in claims 5, 6, 10, and 15-18 is further taught by Aebischer to be "undesirable," *Id.*, due to risk of infection and mechanical failure of pumping devices. As such, Aebischer teaches away from claims 3, 5, 6, 10, 13, and 15-18. A prior art reference must be considered in its entirety, i.e., as a whole, including portions that would lead away from the claimed invention. *W.L. Gore & Associates, Inc. v. Garlock, Inc.*, 721 F.2d 1540, 220 USPQ 303 (Fed. Cir. 1983). If a disclosure criticizes, discredits, or otherwise discourages the claimed invention, it is considered teaching away. *In re Fulton*, 391 F.3d 1195, 73 USPQ2d 1141 (Fed. Cir. 2004). As Aebischer et al. criticizes, discredits, and discourages intraventricular or other delivery alone or by the use of a catheter or spinal pump, it teaches away from the elements of claims 3, 5, 6, 10, 13, and 15-18. Bergmann holds no teaching that corrects this defect. Thus, claims 3, 5, 6, 10, 13, and 15-18 are nonobvious over Aebischer in

view of Bergmann. Claims 3, 5, 6, 10, 13, and 15-18 are believed to be directed to patentable subject matter on independent grounds.

Furthermore, it is submitted that the prior art fails to recognize that gamma aminobutyramide is sufficiently stable as to be amenable for intrathecal or intraventricular delivery. This is submitted to be a surprising result of the present invention and represent an independent basis for the allowance of the pending claims.

In light of the above remarks and those incorporated by reference from the application record, reconsideration and withdrawal of the rejection of claims 1-3, 5-13, 15-18 and 26 under 35 U.S.C. §103(a) over Aebischer et al. in view of Bergmann is requested.

Summary

Claims 1-3, 5-13, 15-18 and 26 are pending in the present application. Claims 1, 11, 18 and 26 are the only claims in independent form. Claims 1, 11, 18, and 26 are currently amended. Applicant submits that the present claims are believed to be in condition for allowance. Therefore, allowance of the pending claims and the passing of this application to issuance are solicited. Should the Examiner find to the contrary or have suggestions as to how the form of a pending claim may be improved, she is respectfully requested to contact the undersigned attorney to resolve any remaining issues.

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Respectfully submitted,

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